

Attorney Docket No. 95121961.029004

Amendments to the Claims

Claims 1-41 (canceled).

42. (Currently Amended) A method of modulating an input light beam, the input light beam comprising a first, a second, and a third primary color, the method comprising:

receiving the input light beam at a polarization stack filter that comprises a stack of birefringent layers and at least one active liquid crystal cell, the polarization stack filter receiving at least the first and second primary colors of the input light beam and operable to temporally modulate the polarizations of the first and second primary colors by imparting a polarization to the first primary color that is different from the polarization of the second primary color;

receiving the input light beam at a beam-splitting element, the beam-splitting element operable to direct the first and second primary colors in a first direction according to the modulation of the polarization stack filter and to direct the third primary color in a second direction;

sequentially receiving the first and second primary colors at a first panel and sequentially modulating the first and second primary colors;

receiving the third primary color at a second panel and modulating the third primary color; and

combining the light of the sequentially modulated first and second primary colors at the beam-splitting element with the light of the third modulated primary color to form an output full-color modulated light beam.

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43. (Previously Presented) A method according to claim 42, wherein the third primary color is red.

44. (Previously Presented) A method according to claim 42, wherein the first and second panels are liquid crystal on silicon panels.

45. (Previously Presented) A method according to claim 42, wherein the beam-splitting element comprises a polarizing beamsplitter.

46. (Previously Presented) A method according to claim 42, wherein during a first time the first primary color has a first polarization and the second primary color has a second polarization and wherein during a second time the first primary color has the second polarization and the second primary color has the first polarization.

47. (Previously Presented) A method according to claim 46, wherein the beam-splitting element comprises a polarizing beamsplitter that during the first time is operable to direct the first primary color to the first panel and during the second time is operable to direct the second primary color to the first panel.

48. (Currently Amended) A two-panel color modulation device operable to receive an input light beam, the input light beam comprising a first, a second, and a third primary color, the modulation device comprising:

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a polarization stack filter that comprises a stack of birefringent layers and at least one active liquid crystal cell, the polarization stack filter receiving at least the first and second primary colors of the input light beam and operable to temporally modulate the polarizations of the first and second primary colors;

a beam-splitting element, the beam-splitting element operable to direct the first and second primary colors in a first direction according to the modulation of the polarization stack filter and to direct the third primary color in a second direction;

a first panel which is operable to receive the first and second primary colors directed in the first direction from the beam-splitting element, and to sequentially modulate the first and second primary colors, and to reflect the modulated first and second primary colors back towards the beam-splitting element; and

a second panel which is operable to receive the third primary color directed in the second direction from the beam splitting element, to modulate the third primary color, and to reflect the modulated third primary color back towards the beam-splitting element,

wherein the beam-splitting element is further operable to combine the light of the modulated first, second, and third primary colors.

49. (Previously Presented) A two-panel color modulation device according to claim 48, wherein the third primary color is red.

50. (Previously Presented) A two-panel color modulation device according to claim 48, wherein the first and second panels are liquid crystal on silicon panels.

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51. (Previously Presented) A two-panel color modulation device according to claim 48, wherein the beam-splitting element comprises a polarizing beamsplitter.

52. (Previously Presented) A two-panel color modulation device according to claim 48, wherein the polarization stack filter that comprises a stack of birefringent layers and at least one active liquid crystal cell is operable to temporally modulate the polarizations of the first and second primary colors wherein during a first time the first primary color has a first polarization and the second primary color has a second polarization and wherein during a second time the first primary color has the second polarization and the second primary color has the first polarization.

53. (Previously Presented) A two-panel color modulation device according to claim 52, wherein the beam-splitting element comprises a polarizing beamsplitter that during the first time is operable to direct the first primary color to the first panel and during the second time is operable to direct the second primary color to the first panel.

54. (Previously Presented) A two-panel color modulation device according to claim 48, and further comprising a clean-up polarizer after the beam-splitting element.

55. (Previously Presented) A two-panel color modulation device according to claim 48, and further comprising a polarizer before the beam-splitting element.

56. (New) A method of modulating an input light beam:

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receiving the input light beam temporal modulator;

temporally modulating selected spectral components of the input light beam by the temporal modulator;

receiving the modulated light from the temporal modulator at a beam-splitting element, the beam-splitting element operable to direct first and second component beams to first and second panels;

sequentially modulating first and second light spectra of the first component beam at the first panel;

sequentially modulating first and second light spectra of the second component beam at the second panel;

combining the light of the sequentially modulated first component beam and the sequentially modulated second component beam to form an output light beam.

57. (New) A method according to claim 56, wherein the first light spectra of the first component beam is a primary color and wherein the first light spectra of the second component beam is the complement of the first component beam.

58. (New) A method according to claim 57, wherein the second light spectra of the first component beam is another primary color and wherein the second light spectra of the second component beam is the complement of the another primary color.

59. (New) A method according to claim 56, wherein the beam-splitting element is a polarized beam splitter.

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60. (New) A method according to claim 56, and further comprising temporally modulating at least certain spectra within the combined first and second light beams.

61. (New) A two-panel color modulation device operable to receive an input light beam, comprising:

a temporal modulator operable to temporally modulating selected spectral components of the input light beam;

a beam-splitting element operable to receive the modulated light from the temporal modulator and to direct first and second component beams along first and second paths;

a first panel positioned along the first path and operable to sequentially modulate first and second light spectra of the first component beam; and

a second panel positioned along the second path and operable to sequentially modulate first and second light spectra of the second component beam.